Toxic Effects of Water Soluble Fractions of Crude Oil, Diesel and Gasoline on Ceratophyllum Demersum

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***Abstract*- Oil exploration and exploitation has resulted in oil pollution in the Niger Delta. This study investigated the toxicity of water soluble fractions (WSFs) of crude oil, diesel fuel and gasoline on *Ceratophyllum demersum (L)*. The parameters measured include fresh weight, biomass production and relative growth rate. The water soluble fractions concentrations used were 25%, 50% 100% for crude oil and diesel and 5%, 10%, 20% were used for gasoline. Results from the study showed that at 25% WSF of crude oil and diesel fuel and 5% WSF of gasoline, there was significant increase ($P < 0.05$) in fresh weight, biomass production and relative growth rate of *Ceratophyllum demersum*. While increase in concentration resulted in decrease in the growth parameters. High concentrations of Water Soluble Fractions of gasoline were the most toxic followed by diesel fuel. This study showed that low concentration of water soluble fractions of petroleum hydrocarbons enhanced growth while high concentration was toxic to the aquatic macrophyte.**

Keywords: **Crude oil, diesel, gasoline, *Ceratophyllum demersum*.**